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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,027	06/14/2001	Radhika R. Roy	104100.01	7183
7590 10/07/2004				
OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, VA 22320			EXAMINER PHUNKULH, BOB A	
			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

UK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/880,027	ROY, RADHIKA R.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bob A. Phunkulh	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US 5,617,539), hereinafter Ludwig.

Regarding claim 1, Ludwig discloses a system for providing real-time multimedia conferencing services, to a dispersed plurality of locations connected to a wide area network (WAN), the system comprising:

the wide area network (WAN) including an backbone network domain and at least one access network domain (a plurality of Multimedia LANs, each comprises of collaborative multimedia workstations 12-1 to 12-10, see figure 4); and

one or more cable modems (WAN gateway 40, see figure 4),

wherein a headend station-based cable modem is provided at each access network domain in said WAN (see col. 3 lines 45-54), and further

wherein said cable modems are designed to carry two-way multimedia signals (see col. 3 lines 45-54).

Art Unit: 2661

Ludwig fails to explicitly teach that ATM network is used in the real-time multimedia conferencing.

However, Ludwig discloses that the system employs asynchronous networks (see col. 3 line 34-44) and ATM switching could be used in the future (see col. 7 lines 5-23).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to replace the WAN and MLAN networks with ATM networks for providing high-speed digital communication.

Regarding claim 2, Ludwig discloses a number of access network domains in the WAN is based on a size of a WAN (see col. 11 lines 10-29).

Regarding claim 3, Ludwig discloses each access network domain includes at least one access multimedia bridge server and at least one cable modem server (MLAN server 60 and WAN gateway, see figure 3).

Regarding claim 4, Ludwig discloses the backbone network domain includes at least one central multimedia bridge server and at least one central network server (gateway 40 and, WAN network manager, see col. 20 lines 17-37).

Regarding claim 5, Ludwig discloses wherein each access network domain includes an access node/switch connected to an node/switch of the backbone network domain (data LAN hub, AV switch, WAN gateway, see figures 3, 4, and 25).

Regarding claim 6, Ludwig discloses wherein the cable modem server and the access multimedia bridge server in each access network domain is connected to the access node/switch in said access network domain (data LAN hub, AV switch, WAN gateway, see figure 3, 4, and 25).

Regarding claim 7, Ludwig discloses wherein a headend station-based cable modem is connected to the access node/switch in said access network domain (data LAN hub, AV switch, WAN gateway, see figures 3, 4, and 25).

Regarding claim 9. The system of claim 4, Ludwig discloses wherein an connection is provided directly to the backbone network domain or to an access network domain access node (see figures 3 and 4).

Claims 8, 10-11, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. in view of Newlin et al. (US 5,877,821), hereinafter Newlin.

Ludwig discloses the WAN gateway 40 includes R&C for

Regarding claims 8, and 14, Ludwig fails to teach that a hybrid fiber coaxial (HFC) access network connected to an ATM access network within the WAN.

Art Unit: 2661

Newlin, on the other hand, teach that it is common to communicate over HFC cable or network in real-time video conferencing (**see col. 2 line 1-10**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to provide HFC network in the system of Ludwig et al. for providing substantial bandwidth at lower cost.

Regarding claim 10, Ludwig discloses the a plurality of locations in a multimedia conference call are all connected to a single access network domain (see figure 1).

Regarding claim 11, Ludwig disclose the locations in a multimedia conference are connected to a plurality of access network domains (see figure 1).

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig in view of Kaperda (US 5,790,806).

Regarding claims 12-13, Ludwig fails to disclose the one or more ATM cable modems include a local area network medium access (MAC) access and ATM protocol conversion system.

Kaperda, on the other hand teach that the cable modems includes a local area network medium access (MAC) access and ATM protocol conversion system in a communication system, and provides modulation/demodulation for the upstream and downstream data paths in the cable network (could be HFC network) (**see col. 2 lines 57 to col. 3 line 3; and col. 10 line 54 to col. 11 lines 16**).

Art Unit: 2661

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to implement the teaching of Kaperda in the system taught by Ludwig et al. for communication between at least two networks which employ different protocols.

***Allowable Subject Matter***

Claim 15 is allowed.

***Conclusion***

**Any response to this action should be mailed to:**

The following address mail to be delivered by the United States Postal Service (USPS) only:

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(703) 872-9306, (for formal communications intended for entry)

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The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

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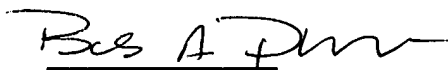
Art Unit: 2661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor **Kenneth Vanderpuye**, can be reach on **(571) 272-3078**. The fax phone number for this group is **(703) 872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Bob A. Phunkulh**



TC 2600  
Art Unit 2661  
October 5, 2004

**BOB PHUNKULH**  
**PRIMARY EXAMINER**